



Virginia Department of
Behavioral Health &
Developmental Services

Support Coordination Quality Review Annual Report

Introduction

The Support Coordination Quality Review (SCQR) process was established to assess and improve the quality of support coordination (also referred to as “case management”) services provided by community services boards (CSBs) to individuals with developmental disabilities (DD) who are receiving one of the home- and community-based services waivers (HCBS Waivers). The results of the SCQR are intended to inform improvements to the system overall. All CSBs receive feedback and technical assistance from the Office of Community Quality Improvement (OCQI) and the Developmental Services Community Resource Consultants (CRCs). Additionally, the results demonstrate whether case management services comply with the Department of Justice Settlement Agreement (DOJ SA) and Centers for Medicare and Medicaid Services (CMS) requirements.

The first SCQR occurred during FY2020, with reviews covering the period up until June 30, 2020. The results reported by the CSBs in FY2020 indicated strong performance on eight of the ten indicators, but the Look Behind revealed substantial disagreement between OCQI specialists and the CSBs on several indicators.

This report covers the second year, which occurred in FY2021 and examined records produced during calendar year 2020. The questions and technical guidance were modified with the goal of improving reliability, with mixed results. New strategies to improve SCQR completion were also implemented so that the response rate was 100% for all CSBs. As a result of these changes, compliance reported by the CSBs declined. However, declines in self-reported compliance do not necessarily reflect a decline in CSB *performance*; FY2020 and FY2021 results cannot be compared directly due to the differences in the samples and questions. Modifications to improve reliability will allow for more meaningful trend data in future years.

Methodology

Sample

For the FY2021 SCQR, 400 records were sampled for review. This number was derived by the Office of Data Quality and Visualization’s (DQV) Statistical Methodologist in accordance with the Settlement Agreement directive to pull “an annual statistically significant stratified statewide sample of individuals receiving HCBS waiver services that ensures record reviews of individuals at each CSB.”

To pull the sample, a sampling frame of eligible individuals was constructed using Waiver Management System (WaMS) data. In order to be eligible, an individual must have met the following criteria:

- Adults 18 and over
- Enrolled in one of the three DD waivers on January 1, 2020 in active, hold, or pending appeal status

- With an authorization for least one DD waiver service on January 1, 2020 AND that individual was still enrolled as of the date (less one day or D-1) of the data pull with an authorization for at least one DD waiver service on D-1.

The population data included the person's full name, CSB for case management, date of birth, and Medicaid number. DQV's Statistical Methodologist pulled a stratified random sample to ensure that CSBs serving fewer individuals were included in the sample.

This year, the sample was divided so that the CSBs received half of their assigned records in the first quarter of the study and half in the second quarter. The goal of splitting up the sample was to ensure mid-point technical assistance to CSBs and to help them stay on track with two smaller deadlines rather than one big one. Each CSB received 50% of the sample at the beginning of January 2021 with a deadline of March 31, 2021 for completion. They received the second half in April 2021 with a deadline of June 30, 2021.

CSBs were asked to review records for the period beginning January 1, 2020 and ending December 31, 2020. This was another difference from the previous year, when CSBs went back one year from whatever date they started the review—meaning that CSBs that waited until the last minute reviewed a different time period than CSBs that finished their reviews early. The review period was standardized so that all CSBs would be equally impacted by changes that occurred at specific points in time, such as the introduction of new protocols or external events such as the COVID-19 pandemic.

The technical assistance for the previous SCQR occurred in the fall of 2020 after the majority of the year covered by the FY2021 SCQR had already passed. Therefore, many of the improvements that resulted from that technical assistance will not be observed until the FY2022 SCQR.

It is important to note that all 400 reviews covered the same time period in the records, calendar year 2020, whether they were assigned in the first quarter or the second quarter. Names were divided between the two quarters at random. Therefore, differences between the results for the first and second quarters should not be considered evidence of the CSB improving or getting worse.

Look Behind and Interrater Reliability

The sampling methodology for the look behind called for a minimum of two records per CSB to be sampled, with twenty additional reviews distributed by waiver population for 100 total retrospective reviews. The number sampled from each CSB ranged from two to four. The five OCQI specialists each completed ten interrater reviews, for a total of fifty interrater reviews. These were not required to be specific records; OCQI specialists arranged travel to neighboring regions as convenient.

In FY2020, the OCQI specialists completed desk reviews due to the COVID-19 pandemic. However, this year, with additional health and safety protocols in place related to COVID-19, the

OCQI specialists completed the Look Behind reviews on site in accordance with the original methodology.

For each question and overall indicator of compliance, the percent agreement was calculated for the look behind (comparing OCQI and the CSBs) and the interrater analysis (comparing OCQI raters with each other). In addition to percent agreement, Maxwell's random error coefficient (RE) was calculated to adjust for agreement expected by chance alone¹. Since Maxwell's RE is for binary outcomes only, an extension proposed by Janes (1979) was used for questions with three or more possible outcomes.² Another common interrater reliability statistic, Cohen's kappa, was considered but not used because the kappa coefficient is reduced when one of the outcomes is highly prevalent.³

Compliance Indicators

The SCQR assesses compliance with several DOJ SA case management provisions. The Commonwealth and the DOJ agreed to the following set of 10 indicators in an April 2019 filing. There is not a one-to-one correlation between the provisions and the indicators. The corresponding DOJ SA provision is listed in parentheses after each indicator.

- **Indicator 1:** There is a signed informed choice form for the current ISP. (III.C.5.c)
- **Indicator 2:** The CSB has offered each person the choice of case manager, and individuals have been offered a choice of providers for each service. (III.C.5.c)
- **Indicator 3:** The ISP includes specific and measurable outcomes, including evidence that employment goals have been discussed and developed, when applicable. (III.C.5.b.i; III.C.7.b)
- **Indicator 4:** The ISP was developed with professionals and nonprofessionals who provide individualized supports, as well as the individual being served and other persons important to the individual being served. (III.C.5.b.i; III.C.5.b.ii)
- **Indicator 5:** The CSB has in place and the case manager has utilized where necessary, established strategies for solving conflict or disagreement within the process of developing or revising ISPs, and addressing changes in the individual's needs, including, but not limited to, reconvening the planning team as necessary to meet the individual's needs. (III.C.5.b.iii; V.F.2)
- **Indicator 6:** The case manager assists in developing the person's ISP that addresses all of the individual's risks, identified needs and preferences. (III.C.5.b.ii; V.F.2)

¹ Maxwell, A. E. (1977) Coefficients of agreement between observers and their interpretation. *British Journal of Psychiatry* **130**, 79-83.

² Janes, C. L. (1979) An extension of the random error coefficient of agreement to NxN tables. *British Journal of Psychiatry* **134**, 617-19.

³ Feng, G. C. (2013) Factors affecting intercoder reliability: a Monte Carlo experiment. *Quality & Quantity* **47**, 2959–2982.

- **Indicator 7:** The case manager assesses risk, and risk mediation plans are in place as determined by the ISP team. (III.C.5.b.ii; V.F.2)
- **Indicator 8:** The ISP includes the necessary services and supports to achieve the outcomes such as medical, social, education, transportation, housing, nutritional, therapeutic, behavioral, psychiatric, nursing, personal care, respite, and other services necessary. (III.C.5.b.i; III.C.5.b.ii; III.C.5.b.iii; V.F.2)
- **Indicator 9:** The case manager completes face-to-face assessments that the individual's ISP is being implemented appropriately and remains appropriate to the individual by meeting their health and safety needs and integration preferences. (III.C.5.b.iii; V.F.2)
- **Indicator 10:** The case manager assesses whether the person's status or needs for services and supports have changed and the plan has been modified as needed. (III.C.5.b.iii; V.F.2)

Results

In FY2021, all 40 CSBs completed their assigned records, resulting in a response rate of 100%. This represented an improvement from the previous year, when only 375 records were completed, and one was excluded from the sample due to the individual being deceased, leaving only 374 out of 401 assigned records for analysis (93%).

The percentage of CSBs reporting compliance with each indicator are displayed in Table 1, with the percentage from FY2020 reported for comparison purposes.

Table 1: Percentage of records in compliance by indicator

| Indicator | FY20 CSB-reported Compliance | FY21 records in compliance | FY21 records not in compliance | FY21 CSB-reported compliance | Difference |
|--------------|------------------------------|----------------------------|--------------------------------|------------------------------|------------|
| Indicator 1 | 91.4% | 352 | 48 | 88.0% | -3.4% |
| Indicator 2 | 79.9% | 310 | 90 | 77.5% | -2.4% |
| Indicator 3 | 92.5% | 330 | 70 | 82.5% | -10.0% |
| Indicator 4 | 81.8% | 340 | 60 | 85.0% | 3.2% |
| Indicator 5 | 99.7% | 398 | 2 | 99.5% | -0.2% |
| Indicator 6 | 87.4% | 277 | 123 | 69.3% | -18.1% |
| Indicator 7 | 87.4% | 399 | 1 | 92.0% | 12.4% |
| Indicator 8 | 97.9% | 372 | 28 | 93.0% | -4.9% |
| Indicator 9 | 94.7% | 201 | 199 | 50.3% | -44.4% |
| Indicator 10 | 95.7% | 299 | 101 | 74.8% | -20.9% |

Self-reported compliance declined on eight of the ten indicators; however **these results should not be interpreted as a decline in CSB performance**. The sample from FY2020 was most likely biased due to 26 records being missing; if CSBs that failed to complete their samples were also

less likely to be in compliance, the results from the FY2020 SCQR may be higher than they would have been with a full sample.

Additionally, on the 100 records reviewed for the FY2020 look behind, OCQI specialists gave lower scores than the CSBs on all ten indicators, suggesting that the results from FY2020 may have been inflated due to CSBs being more lenient with the scoring and/or misunderstanding some of the questions.

The questions and technical guidance were modified for FY2021 with the goal of improving agreement between CQI specialists and the CSBs. For some indicators (6, 9, and 10), questions were revised so that CSBs had to check off each requirement separately, and missing just one item meant that the indicator was scored as not being met.

These changes may reduce self-reported scores in the short-term, but given these confounding factors, we should not conclude that the decreases in self-reported CSB scores represent a decline in the quality of case management on the ground. In fact, the Look Behind results show a positive trend on several of the indicators (comparing OCQI reviews in FY2021 to those completed in FY2020). Trends in self-reported performance will become more meaningful in future years as issues impacting reliability are resolved.

Look Behind and Interrater Reliability Results

The look behind and interrater results for each indicator are displayed in Table 1. Each value represents agreement on whether the indicator was “met” or “not met” regardless of how the rater arrived at that conclusion.

Some indicators are composed of multiple items, meaning that an indicator could have been scored as “met” for different reasons. For example, one reviewer could have indicated that no disagreement occurred during the ISP meeting, while another could indicate that a disagreement did occur but was resolved. Therefore, agreement by question item is included in the review of each indicator below.

The Maxwell RE coefficient ranges from -1 (perfect disagreement) to 0 (no agreement beyond what is expected by chance) to 1 (perfect agreement). Scores in between those values can be interpreted on a spectrum; cutoff scores are arbitrary, as there is no consequential difference between a value of 0.599 and 0.600, for example. However, for easier interpretation, scores were coded with the following color scheme:

| | |
|-----------------------|--------------|
| No agreement | < 0 |
| Weak agreement | 0.00 to 0.39 |
| Moderate agreement | 0.40 to 0.59 |
| Substantial agreement | 0.60 to 1 |

The results for interrater agreement between QI specialists are displayed in Table 2. Agreement improved on nine out of ten indicators and was moderate or substantial for all items.

The OCQI specialists did training, mock reviews, and debriefings after the first and second weeks to improve interrater reliability. The results indicate that these efforts, along with the wording changes to the questions and technical guidance, were successful.

Table 2: Interrater Agreement: FY2020 and FY2021

| Indicator | FY2020 % agree | FY2020 Maxwell's RE | FY2021 % agree | FY2021 Maxwell's RE | Difference in Maxwell's RE value |
|--|-------------------|------------------------|-------------------|---------------------------|--|
| 1: Signed choice form | 92% | 0.84 | 98% | 0.96 | 0.12 |
| 2: Individual offered a choice | 78% | 0.56 | 92% | 0.84 | 0.28 |
| 3: Specific and measurable outcomes | 60% | 0.20 | 72% | 0.44 | 0.24 |
| 4: Persons who participated in ISP | 70% | 0.40 | 78% | 0.56 | 0.16 |
| 5: Disagreement and resolution | 90% | 0.80 | 94% | 0.88 | 0.08 |
| 6: ISP signature page | 74% | 0.48 | 94% | 0.88 | 0.40 |
| 7: Risk assessment and mediation | 78% | 0.56 | 82% | 0.64 | 0.08 |
| 8: Linkages, referrals, authorizations | 94% | 0.88 | 98% | 0.96 | 0.08 |
| 9: Assessed plan implementation | 58% | 0.16 | 76% | 0.52 | 0.36 |
| 10: Change in needs or status | 84% | 0.68 | 80% | 0.60 | -0.08 |

For the Look Behind, agreement between OCQI specialists and CSBs improved on six indicators and declined on four indicators, with declines being less than 0.05 and therefore negligible on two of those indicators. (See Table 3.)

Low agreement does not necessarily mean that QI specialists gave lower scores than the CSBs. In some cases, disagreement was caused by the QI specialists finding *more* compliance than was reported by the CSBs.

Table 3: Look Behind Agreement: FY2020 and FY2021

| Indicator | FY2020 % agree | FY2020 Maxwell's RE | FY2021 % agree | FY2021 Maxwell's RE | Difference in RE value |
|--|-------------------|------------------------|-------------------|------------------------|---------------------------|
| 1: Signed choice form | 80% | 0.60 | 92% | 0.84 | 0.24 |
| 2: Individual offered a choice | 64% | 0.27 | 82% | 0.64 | 0.37 |
| 3: Specific and measurable outcomes | 46% | -0.07 | 46% | -0.08 | -0.01 |
| 4: Persons who participated in ISP | 75% | 0.49 | 79% | 0.58 | 0.09 |
| 5: Disagreement and resolution | 91% | 0.82 | 95% | 0.90 | 0.08 |
| 6: ISP signature page | 79% | 0.58 | 75% | 0.50 | -0.08 |
| 7: Risk assessment and mediation | 63% | 0.25 | 75% | 0.50 | 0.25 |
| 8: Linkages, referrals, authorizations | 90% | 0.80 | 88% | 0.76 | -0.04 |

| | | | | | |
|---------------------------------|-----|-------|-----|------|-------|
| 9: Assessed plan implementation | 24% | -0.52 | 63% | 0.26 | 0.78 |
| 10: Change in needs or status | 82% | 0.64 | 76% | 0.52 | -0.12 |

Table 4 displays the difference in average scores, by indicator, for the records reviewed for the Look Behind (99 records in FY2020 and 100 records in FY2021). In FY2020, the QI specialists gave lower scores on all ten indicators; in FY2021, however, the QI specialists gave higher scores on four indicators and lower scores on five indicators. Average scores were the same for Indicator 8. The reasons for these discrepancies will be discussed below by indicator.

Table 4: Average indicator scores (Look Behind cases only)

| Indicator | FY20 CSB | FY20 CQI | FY20 Difference | FY2021 CSB | FY2021 CQI | FY2021 Difference |
|-----------|----------|----------|-----------------|------------|------------|-------------------|
| 1 | 92% | 82% | -10% | 91% | 95% | 4% |
| 2 | 75% | 57% | -18% | 80% | 78% | -2% |
| 3 | 93% | 48% | -45% | 86% | 32% | -54% |
| 4 | 81% | 76% | -5% | 86% | 75% | -11% |
| 5 | 100% | 91% | -9% | 100% | 95% | -5% |
| 6 | 90% | 85% | -5% | 69% | 82% | 13% |
| 7 | 85% | 70% | -15% | 89% | 84% | -5% |
| 8 | 98% | 92% | -6% | 92% | 92% | 0% |
| 9 | 95% | 19% | -76% | 54% | 73% | 19% |
| 10 | 98% | 84% | -14% | 75% | 83% | 8% |

Indicator 1

Q24: Is there a signed Virginia Informed Choice (VIC) DMAS 460 form for the current PC ISP?

| Question(s) | % yes in full sample | Look Behind % agreement | Look Behind Maxwell's RE | Interrater % agreement | Interrater Maxwell's RE |
|---------------|----------------------|-------------------------|--------------------------|------------------------|-------------------------|
| Indicator met | 88% | 92% | 0.84 | 98% | 0.96 |

Self-reported compliance on this item declined slightly but remained above 86%. However, agreement between QI specialists and the CSBs improved.

| | CSB met | CSB not met |
|------------|---------|-------------|
| QI met | 89 | 6 |
| QI not met | 2 | 3 |

In FY2020, there was some confusion about whether an internal form could be substituted for the official DMAS 460 form. Additionally, some reviewers were unsure of how to handle missing dates or other problems with the form. The high agreement found in FY2021 suggests that efforts to clarify the requirements were successful.

Indicator 2

Q26: Does the completed VIC confirm that the individual was offered a choice of...

| Question(s) | % yes in full sample | Look Behind % agreement | Look Behind Maxwell's RE | Interrater % agreement | Interrater Maxwell's RE |
|---------------------------------|----------------------|-------------------------|--------------------------|------------------------|-------------------------|
| ...support coordinator? (named) | 89% | 81% | 0.72 | 92% | 0.88 |
| ...DD waiver providers? | 98% | 89% | 0.84 | 98% | 0.96 |
| Indicator met | 78% | 82% | 0.64 | 92% | 0.84 |

In order for this indicator to be met, reviewers must indicate that the individual received a choice of support coordinator *and* a choice of DD waiver providers. Disagreement on either item will lead to disagreement on whether the indicator was met.

| | CSB met | CSB not met |
|------------|---------|-------------|
| QI met | 70 | 8 |
| QI not met | 10 | 12 |

The percentage of records meeting this indicator remained fairly consistent with the previous year (80% in FY2020 vs. 78% in FY2021). However, agreement between QI specialists and CSBs improved substantially. In FY2020, QI specialists found the indicator to be met on only 57% of the Look Behind records, suggesting the number reported by the CSBs was inflated due to misunderstanding of the question.

While the number reported by CSBs in FY2021 appears to be a slight decrease, the Look Behind results suggest that CSB *performance* on this indicator actually improved.

Indicator 3

Q29: Does the current PC ISP Part III include specific and measurable outcomes?

| Question(s) | % yes in full sample | Look Behind % agreement | Look Behind Maxwell's RE | Interrater % agreement | Interrater Maxwell's RE |
|----------------------|----------------------|-------------------------|--------------------------|------------------------|-------------------------|
| Indicator met | 83% | 46% | -0.08 | 72% | 0.44 |

For this indicator, efforts to improve agreement in the Look Behind were unsuccessful. Agreement remained very low, no better than what would be expected by chance alone.

| | CSB met | CSB not met |
|------------|---------|-------------|
| QI met | 32 | 0 |
| QI not met | 54 | 14 |

While the CSBs reported compliance on 83% of records for this indicator, QI specialists only scored 32% of records reviewed for the Look Behind as meeting this indicator. QI specialists determined that ambiguous wording in the technical guidance caused inconsistent scoring on this item. The guidance stated:

Q29: To indicate “Yes,” outcomes must have a target date and key steps that are related to and lead to the outcome(s) in order to be considered measurable.

Measurable outcomes are those that include detailed information and quantifiable (observable, countable) elements, including:

- individual's name,
- desired outcome(s),
- key steps and services to achieve the desired outcomes (this is not an all-encompassing list, but serves as the starting point for developing support activities in the Part V),
- frequency of the outcome (e.g. daily, weekly, monthly, etc.), and
- target date for the outcome.

The intention was that only the target date and key steps should be required criteria, but QI specialists and several CSBs initially interpreted the remainder of the guidance to mean that all of the other criteria were also required, including the frequency of the desired outcome. However, these additional criteria are found in Part V, not in Part III, and the question references Part III.

The Look Behind scoring was already complete when the problem was discovered. However, OCQI conducted a second review of the sampled records and documented the percentage of ISP outcomes that met the actual required criteria (key steps and target date) versus those that met these plus the additional criteria erroneously used in the initial Look Behind reviews.

| | Look Behind Q29 (100 total) | |
|---|-----------------------------|-------------------------|
| | Key Steps and Target Date | All Measurable Criteria |
| 75% of outcomes in ISP met criteria | 91% | 20% |
| | 91/100 | 20/100 |
| 86% of outcomes in ISP met criteria | 84% | 7% |
| | 84/100 | 7/100 |
| 100% of outcomes in ISP met criteria | 73% | 6% |
| | 73/100 | 6/100 |

These results indicate that if the correct criteria had been used, the percentage of Look Behind records found in compliance by QI specialists would have been roughly equal to the percentage reported by CSBs (which was 86% for the 100 Look Behind records).

The free-text responses entered by CSBs indicate that some CSBs were also confused by the technical guidance. For example:

Not all outcome statements contain a frequency.

Frequency missing, not on WAMS; this item is included on the provider Part V

Frequency of the outcome was excluded.

The above records, and several others with similar explanations, should have been scored as meeting the indicator. Therefore, both the CSB-reported results and the Look Behind results were impacted by the misunderstanding.

Scores were not revised to maintain consistent methodology for both CSBs and QI specialists; reviews cannot be modified retroactively. However, these findings put the initial result in context.

For the FY2022 SCQR, DBHDS will update the technical guidance to clearly communicate that only the target date and key steps are required in Part III.

Indicator 4

Q31: Which of the following professionals and nonprofessionals who are important to the individual being served aided in the development of Part IV of the current PC ISP?

| Item | % yes in full sample | Look Behind % agreement | Look Behind Maxwell's RE | Interrater % agreement | Interrater Maxwell's RE |
|--|----------------------|-------------------------|--------------------------|------------------------|-------------------------|
| Individual | 93% | 88% | 0.76 | 96% | 0.92 |
| SDM | 66% | 91% | 0.82 | 96% | 0.92 |
| Support coordinator | 100% | 98% | 0.96 | 100% | 1.00 |
| Service providers | 95% | 88% | 0.76 | 84% | 0.68 |
| Other people important to the individual | 82% | 77% | 0.54 | 72% | 0.44 |
| Indicator met | 85% | 79% | 0.58 | 78% | 0.56 |

Indicator 4 is comprised of five different items. In order to meet this indicator, the individual, support coordinator, and service providers were required to be present. The SDM was only required to be present if the ISP indicated the individual had an SDM, noted in Q11 of the tool. "Other people important to the individual" was optional.

| | CSB met | CSB not met |
|------------|---------|-------------|
| QI met | 70 | 5 |
| QI not met | 16 | 9 |

The technical guidance specified that a signature was required. However, during the COVID-19 pandemic, this rule was suspended to allow for video conferences. This may have resulted in lower scores on the indicator.

For both the interrater analysis and the retrospective reviews, agreement was strong for each item but weaker on the overall indicator because the five items provided five different opportunities for disagreement. Most of the disagreement represented QI specialists marking the indicator as missed where CSBs did not; however, for five records, the CSBs indicated that the indicator was not met while the QI specialists said it was met.

Indicator 5

Q32: Is there indication in Part IV of the current PC ISP that any disagreement occurred while developing and/or revising the PC ISP?

(If yes) Q33: Is there documentation in Part IV of the PC ISP indicating that the SC/CM had a plan to resolve the disagreement?

| Question(s) | % yes in full sample | Look Behind % agreement | Look Behind Maxwell's RE | Interrater % agreement | Interrater Maxwell's RE |
|------------------------------|----------------------|-------------------------|--------------------------|------------------------|-------------------------|
| Disagreement occurred | 0% | 89% | 0.78 | 84% | 0.68 |
| Plan to resolve disagreement | NA | 89% | 0.85 | 84% | 0.79 |
| Indicator met | 100% | 95% | 0.90 | 94% | 0.88 |

In the full sample, all of the CSBs indicated that this indicator was met 100% of the time. They also said that no disagreements occurred. While the QI

| | CSB met | CSB not met |
|------------|---------|-------------|
| QI met | 95 | 0 |
| QI not met | 5 | 0 |

specialists disagreed on 5 of the Look Behind records, these were caused a confusing layout in an earlier version of the ISP that prompted some support coordinators to inadvertently indicate a disagreement when there was none.

Indicator 6

Q63: Is there a SC/CM's signature present on the current ISP signature page?

Q64: Which of the following does the PC ISP contain?

| Question(s) | % yes in full sample | Look Behind % agreement | Look Behind Maxwell's RE | Interrater % agreement | Interrater Maxwell's RE |
|--|----------------------|-------------------------|--------------------------|------------------------|-------------------------|
| PC ISP | 95% | 96% | 0.92 | 98% | 0.96 |
| SC/CM Part V | 96% | 95% | 0.90 | 98% | 0.96 |
| Contains: outcomes/supports to address the individual's known risks | 93% | 90% | 0.80 | 96% | 0.92 |

| | | | | | |
|--|------|------|------|------|------|
| Contains: actions to be taken to confirm any potential risks | 76% | 80% | 0.60 | 94% | 0.88 |
| Contains: the individual's behavioral and medical needs | 95% | 88% | 0.76 | 98% | 0.96 |
| Contains: the individual's preferences | 100% | 100% | 1.00 | 100% | 1.00 |
| Indicator met | 69% | 75% | 0.50 | 94% | 0.88 |

Indicator 6 is composed of six different items, and CSBs will be scored as not meeting the indicator if even one item is missing. Therefore, while scores

| | CSB met | CSB not met |
|------------|---------|-------------|
| QI met | 63 | 19 |
| QI not met | 6 | 12 |

were high for each individual items, overall compliance on the indicator was below 86%. The same pattern occurred for agreement on the Look Behind: It was high for individual items but only moderate on the overall indicator. This happens, for example, when both reviewers agree that five of the items are met (boosting agreement scores on those items) but disagree on just one item, which causes them to disagree on the overall indicator. Most disagreements on whether the indicator was met reflect disagreement on just one of the six items.

In this case, however, the QI specialists were more likely to find that the indicator had been met. They found compliance on 19 of the records that were scored by the CSBs as not meeting all requirements.

Indicator 7

Q66: Does the PC ISP Essential Information indicate that the SC assessed for risk?

Q68: Did the ISP team develop a risk mediation plan?

| Question(s) | % yes in full sample | Look Behind % agreement | Look Behind Maxwell's RE | Interrater % agreement | Interrater Maxwell's RE |
|--|----------------------|-------------------------|--------------------------|------------------------|-------------------------|
| Assessed for risk | 97% | 93% | 0.86 | 98% | 0.96 |
| Developed risk mediation plan (or) no risks identified | 95% | 60% | 0.40 | 74% | 0.61 |
| Indicator met | 92% | 75% | 0.50 | 82% | 0.64 |

On this indicator, disagreement occurred in both directions. CSBs said the indicator was met, while QI specialists disagreed, in 15% of Look Behind cases.

| | CSB met | CSB not met |
|------------|---------|-------------|
| QI met | 74 | 10 |
| QI not met | 15 | 1 |

However, QI specialists said the indicator was met while CSBs disagreed on 10% of Look Behind cases.

These results represent an improvement compared to the previous year when the Maxwell's RE value was only 0.25 (weak agreement). For the look behind cases, CSBs and QI specialists were 15 percentage points apart in FY2020 but only 5 percentage points apart in FY2021.

Indicator 8

Q75: Is there documentation that the SC/CM made linkages, referrals, and service authorizations based on outcomes identified in the SC Part V progress notes for the PC ISP?

| Question(s) | % yes in full sample | Look Behind % agreement | Look Behind Maxwell's RE | Interrater % agreement | Interrater Maxwell's RE |
|--|----------------------|-------------------------|--------------------------|------------------------|-------------------------|
| Made linkages, referrals, and service authorizations | 93% | 88% | 0.76 | 98% | 0.96 |

Both compliance and agreement were strong for this indicator. Similar results were found in FY2020.

| | | |
|------------|---------|-------------|
| | CSB met | CSB not met |
| QI met | 86 | 6 |
| QI not met | 6 | 2 |

The technical guidance for this question indicated that there would be a third option: "Not applicable: No linkages or referrals were needed." However, this option was accidentally left off the survey. The free text responses indicate that several CSBs selected "No" when no linkages or referrals were required. For example:

Not applicable, no linkages or referrals were needed

There were no linkages or referrals needed during this period.

There is no option for N/A on this survey. No linkages or referrals were needed.

This error seems to have depressed the overall compliance score. However, it was still above 86% and similar to the previous year's score. The NA option will be added to the survey for the FY2022 SCQR.

Indicator 9

Q83: Consider the last four face-to-face visits completed prior to January 1, 2021. Does the documentation show that the SC/CM assessed whether the individual's support plan was being implemented appropriately?

| Question(s) | % yes in full sample | Look Behind % agreement | Look Behind Maxwell's RE | Interrater % agreement | Interrater Maxwell's RE |
|--|----------------------|-------------------------|--------------------------|------------------------|-------------------------|
| assesses individual's express satisfaction with services and the progress being made | 99% | 97% | 0.94 | 94% | 0.88 |
| understanding of their role in providing support | 91% | 87% | 0.74 | 88% | 0.76 |
| assesses whether behavioral services are available and | 66% | 69% | 0.38 | 96% | 0.92 |

| | | | | | |
|---|-----|-----|------|-----|------|
| occurring as needed and as authorized | | | | | |
| assesses whether nursing services are available and occurring as needed and as authorized | 55% | 63% | 0.26 | 86% | 0.72 |
| assesses whether other services are available and occurring as needed and as authorized | 96% | 93% | 0.86 | 98% | 0.96 |
| assesses whether skill-building services are occurring as needed and as authorized | 84% | 90% | 0.80 | 88% | 0.76 |
| assesses whether community involvement occurs as described in the PC ISP | 97% | 95% | 0.90 | 96% | 0.92 |
| Indicator met | 50% | 63% | 0.26 | 76% | 0.52 |

For Indicator 9, agreement between QI specialists and CSBs was extremely low in FY2020. The wording and guidance were revised with the goal of improving agreement. Required components were split into separate checkboxes to ensure that respondents considered every single component in their answer.

| | CSB met | CSB not met |
|------------|---------|-------------|
| QI met | 45 | 28 |
| QI not met | 9 | 18 |

However, the new question performed poorly due to a misunderstanding that DBHDS did not anticipate: A number of CSBs did not check nursing or behavioral services if the individual did not require those services. Leaving one or both of those boxes blank meant that the record was scored as not meeting the indicator.

As a result of this confusion, agreement between QI specialists and CSBs was low, but in the opposite direction of what happened in the previous year. QI specialists scored 73% of the Look Behind records as meeting the indicator, verses only 54% of records scored as met by the CSBs.

The results for this indicator are expected to improve in the FY2022 SCQR due to the introduction of the on-site visit tool, which was fully implemented in December 2020 (the last month of the review period for the FY2021). Additionally, we expect to see improvement once the question and guidance are clarified to ensure that CSBs know how to score situations in which behavioral or nursing services are not needed.

Indicator 10

Q84: Consider the last four face-to-face visits completed prior to January 1, 2021. Did the SC assess, at least every 90 days, whether the individual's status or need for services and supports changed?

Q85: If a face-to-face visit indicated a change in status or needs, was the ISP modified to reflect the change in status or needs?

| Question(s) | % yes in full sample | Look Behind % agreement | Look Behind Maxwell's RE | Interrater % agreement | Interrater Maxwell's RE |
|---|----------------------|-------------------------|--------------------------|------------------------|-------------------------|
| assesses for any new or increased concerns with the environment being clean, safe and appropriate to the individual's needs | 96% | 88% | 0.76 | 82% | 0.64 |
| assesses if environmental modifications or assistive technologies are lacking but needed to increase independence or prevent institutionalization | 83% | 83% | 0.66 | 94% | 0.88 |
| assesses for any new or increased concerns with the individual's health and safety | 100% | 98% | 0.96 | 96% | 0.92 |
| assesses that any significant life changes that impact services | 96% | 96% | 0.92 | 100% | 1.00 |
| assesses for any concerns related to potential abuse, neglect or exploitation | 87% | 88% | 0.76 | 94% | 0.88 |
| ISP modified to reflect the change in status or needs or not applicable | 98% | 84% | 0.76 | 80% | 0.70 |
| Indicator met | 75% | 76% | 0.52 | 80% | 0.60 |

In FY2020, this indicator was composed of only two items, and compliance reported by the CSBs was high. In an effort to improve reliability, the indicator was split into six different items. This resulted in a lower overall score, since all six needed to be checked for the indicator to be considered met.

| | CSB met | CSB not met |
|------------|---------|-------------|
| QI met | 67 | 16 |
| QI not met | 8 | 9 |

The Look Behind results suggest that there may be error in the opposite direction from what was observed in FY2020. While the QI specialist scores on this indicator were 14 percentage points lower than the CSB scores in FY2020, this year the QI specialist scores were 8 percentage points higher.

All other questions

The results for the remaining questions (not included in indicators) are in the appendix. Scores on the non-indicator items were generally strong, with substantial agreement observed in the Look Behind for most of the questions. One exception was Q22, "Was an Annual Risk Assessment (ARA) completed for the current PC ISP?" where only weak agreement was observed.

For questions about employment, community engagement, and relationships, additional questions were added to capture evidence found outside of the expected location in the record. Summary scores for those items are included in the table. Sometimes, the total appears slightly different due to rounding.

Conclusion

The results for FY2021 indicate that the SCQR is a useful means to assess the quality of case management. The results help to inform the critical components of the service, including the value of documentation and the standardization of content across CSBs. Additionally, the results of the SCQR, combined with the Look Behind, facilitated productive conversations with CSBs during technical assistance.

While continued modifications would be beneficial to improve accuracy and reliability, some improvements were observed in FY2021: Interrater reliability between QI specialists increased for most indicators, and agreement with CSBs increased for some items and indicators. The full sample was received, eliminating a source of bias from the previous year, and CSBs appear to have been more rigorous in their scoring (too rigorous, in some cases).

However, efforts to improve reliability on other items failed or proved to be counterproductive. DBHDS will learn from these results and modify both the questions and the technical guidance in advance of the FY2022 SCQR.

Appendix

Table 5: Scores for all other questions

| Q | Question text | % in full sample | Look Behind % agree | Look Behind Maxwell's RE | Interrater % agree | Interrater Maxwell's RE |
|-----|---|------------------------------|---------------------|--------------------------|--------------------|-------------------------|
| Q6 | Please select the individual's sex. | 55% male; 45% female | 99% | 0.98 | 96% | 0.92 |
| Q9 | What is the individual's waiver type? Select the waiver that the individual is currently receiving. | 85% CL; 14% FIS; 2% BI | 94% | 0.91 | 98% | 0.97 |
| Q11 | Does the individual have a substitute decision maker (SDM) identified in the current person-centered Individual | 68% | 91% | 0.82 | 86% | 0.72 |

| | | | | | | |
|-------|--|------|------|------|------|------|
| | Support Plan (PC ISP) Part II-Representation? | | | | | |
| Q12 | Is documentation supporting a developmental disability diagnosis present? | 99% | 100% | 1.00 | 100% | 1.00 |
| Q14 | Is there a Virginia Individual Developmental Disability Eligibility Survey (VIDES) in the record that was completed for the current PC ISP? | 100% | 99% | 0.98 | 100% | 1.00 |
| Q16 | Is there documentation that the individual was given a choice of institutional care or home- and community-based services? | 91% | 93% | 0.86 | 100% | 1.00 |
| Q18 | Was the Supports Intensity Scale© (SIS©) completed within the last three years of the date of the current PC ISP or as appropriate for Waiver? | 99% | 93% | 0.86 | 96% | 0.92 |
| Q19 | Was there documentation demonstrating that a SIS© update has been requested? | 1% | 93% | 0.90 | 92% | 0.88 |
| Q21 | Does the current PC ISP contain a completed Risk Awareness Tool (RAT)? | 55% | 64% | 0.28 | 74% | 0.48 |
| Q22 | Was an Annual Risk Assessment (ARA) completed for the current PC ISP? | 44% | 64% | 0.46 | 74% | 0.48 |
| Q27_1 | Are the following documents current and signed by the individual or SDM? ... PSP ISP signed | 87% | 89% | 0.78 | 92% | 0.84 |
| Q27_2 | Are the following documents current and signed by the individual or SDM? ... CM/CM Part V signed | 82% | 90% | 0.80 | 98% | 0.96 |
| Q36 | Is there evidence in the record that the SC/CM discussed options for independent housing? | 79% | 76% | 0.52 | 80% | 0.60 |
| Q37 | Is there evidence elsewhere in the record that the SC/CM discussed access to independent housing? | 6% | 75% | 0.63 | 76% | 0.64 |
| | Independent housing discussion total (Q36+Q37) | 85% | | | | |
| Q40 | Is there evidence in the record that the SC/CM facilitated access to independent housing? (% yes is for yes or not applicable) | 84% | 72% | 0.65 | 72% | 0.65 |

| | | | | | | |
|-----|--|-----|-----|------|-----|------|
| Q42 | Is there evidence in the record that the SC/CM discussed options for employment? | 92% | 88% | 0.76 | 96% | 0.92 |
| Q43 | Is there evidence elsewhere in the record that the SC/CM discussed options for employment? | 3% | 87% | 0.81 | 94% | 0.91 |
| | Employment discussion total (Q42+Q43) | 95% | | | | |
| Q46 | Is there evidence in the record that the SC/CM facilitated access to employment? (% yes is for yes or not applicable) | 93% | 72% | 0.65 | 80% | 0.75 |
| Q47 | Is there evidence elsewhere in the record that the SC/CM facilitated access to employment? Yes or not applicable | 1% | 96% | 0.92 | 90% | 0.85 |
| | Employment facilitation total (Q46+Q47) | 93% | | | | |
| Q50 | Is there evidence in the record that the SC/CM discussed options for integrated community involvement/Community Engagement/Community Coaching? | 93% | 92% | 0.84 | 96% | 0.92 |
| Q51 | Is there evidence elsewhere in the record that the SC/CM discussed options for integrated community involvement/Community Engagement/Community Coaching? | 2% | 92% | 0.88 | 96% | 0.94 |
| | Community engagement discussion total (Q50+Q51) | 95% | | | | |
| Q54 | Is there evidence in the record that the SC/CM facilitated access to integrated community involvement/Community Engagement/Community Coaching? | 68% | 64% | 0.46 | 80% | 0.70 |
| Q57 | Is it evident in the PC ISP that the SC/CM discussed relationships and interactions with people other than paid program staff? | 78% | 76% | 0.52 | 90% | 0.80 |
| Q58 | Is there evidence elsewhere in the record that the SC/CM discussed relationships and | 6% | 76% | 0.64 | 90% | 0.85 |

| | | | | | | |
|-------|---|-------------------------|-----|------|------|------|
| | interactions with people other than paid program staff? | | | | | |
| | Relationship discussion total (Q57+Q58) | 83% | | | | |
| Q61 | Is there evidence in the record that the SC/CM facilitated relationships and interactions with people other than paid program staff? | 62% | 62% | 0.43 | 82% | 0.73 |
| Q70 | Did the individual meet Regional Support Team (RST) criteria at any point during the review period? | 97% | 99% | 0.98 | 100% | 1.00 |
| Q71 | Did the SC/CM submit a RST referral to a CRC within the specified time frame? (% yes is for those who said individual met criteria in Q70) | 92% | 98% | 0.97 | 100% | 1.00 |
| Q73 | Is there documentation completed within the review period that demonstrates that the individual was informed of her/his/their human rights? | 92% | 81% | 0.62 | 88% | 0.76 |
| Q77 | Were the four person-centered reviews completed prior to January 1, 2021 completed in a timely manner as required by Medicaid? | 88% | 86% | 0.72 | 96% | 0.92 |
| Q78 | What is the most intensive type of monitoring the individual received for the last four face-to-face visits completed prior to January 1, 2021? | 54.5% TCM; 45.5% ECM | 95% | 0.90 | 90% | 0.80 |
| Q79 | For the last four face-to-face visits completed prior to January 1, 2021, is there documentation in the record that the SC/CM conducted the visits at least every 90 days (no more than 100 days with grace period)? (TCM only) | 87% | 88% | 0.82 | 82% | 0.73 |
| Q81_1 | Did the SC/CM conduct MONTHLY face-to-face visits that occurred ...no more than 40 days apart while ECM was required? (ECM only) | 84% | 89% | 0.84 | 86% | 0.79 |
| Q81_2 | Did the SC/CM conduct MONTHLY face-to-face visits that occurred ...every other month in the individual's home? | 87% | 87% | 0.81 | 82% | 0.73 |

| | | | | | | |
|-----|--|---|-----|------|-----|------|
| Q87 | What is the status of the current PC ISP (Parts I through IV) in WaMS? | 76% Pending provider completion; 19% ISP completed; 6% Pending SC input | 82% | 0.73 | 88% | 0.82 |
|-----|--|---|-----|------|-----|------|

Table 6: Records in compliance by CSB

| CSB | Region | Records in sample | Records in compliance | Records not in compliance | % in compliance |
|-----------------------|--------|-------------------|-----------------------|---------------------------|-----------------|
| Alexandria | 2 | 6 | 4 | 2 | 66.67% |
| Alleghany Highlands | 1 | 6 | 2 | 4 | 33.33% |
| Arlington | 2 | 7 | 4 | 3 | 57.14% |
| Blue Ridge | 3 | 11 | 0 | 11 | 0.00% |
| Chesapeake | 5 | 9 | 1 | 8 | 11.11% |
| Chesterfield | 4 | 20 | 0 | 20 | 0.00% |
| Colonial | 5 | 7 | 3 | 4 | 42.86% |
| Crossroads | 4 | 8 | 4 | 4 | 50.00% |
| Cumberland Mountain | 3 | 8 | 8 | 0 | 100.00% |
| Danville-Pittsylvania | 3 | 10 | 4 | 6 | 40.00% |
| Dickenson | 3 | 5 | 3 | 2 | 60.00% |
| District 19 | 4 | 10 | 0 | 9 | 0.00% |
| Eastern Shore | 5 | 7 | 5 | 2 | 71.43% |
| Fairfax-Falls Church | 2 | 22 | 4 | 18 | 18.18% |
| Goochland-Powhatan | 4 | 6 | 5 | 1 | 83.33% |
| Hampton-NN | 5 | 14 | 8 | 6 | 57.14% |
| Hanover | 4 | 8 | 3 | 5 | 37.50% |
| Harrisonburg-Rgkhm | 1 | 8 | 1 | 7 | 12.50% |
| Henrico | 4 | 14 | 10 | 4 | 71.43% |
| Highlands | 3 | 7 | 2 | 5 | 28.57% |
| Horizon | 1 | 15 | 2 | 13 | 13.33% |
| Loudoun | 2 | 9 | 5 | 4 | 55.56% |
| Middle Peninsula-NN | 5 | 9 | 7 | 2 | 77.78% |
| Mount Rogers | 3 | 10 | 6 | 4 | 60.00% |
| New River Valley | 3 | 9 | 0 | 10 | 0.00% |
| Norfolk | 5 | 13 | 1 | 12 | 7.69% |
| Northwestern | 1 | 11 | 9 | 2 | 81.82% |
| Piedmont | 3 | 10 | 2 | 8 | 20.00% |
| Planning District One | 3 | 7 | 6 | 1 | 85.71% |
| Portsmouth | 5 | 9 | 0 | 9 | 0.00% |
| Prince William | 2 | 12 | 5 | 7 | 41.67% |
| Rappahannock-Rapidan | 1 | 9 | 2 | 7 | 22.22% |

| | | | | | |
|-------------------|---|------------|------------|------------|---------------|
| Rappahannock Area | 1 | 13 | 6 | 7 | 46.15% |
| Region Ten | 1 | 10 | 10 | 0 | 100.00% |
| Richmond | 4 | 12 | 7 | 5 | 58.33% |
| Rockbridge | 1 | 6 | 4 | 2 | 66.67% |
| Southside | 3 | 8 | 5 | 3 | 62.50% |
| Valley | 1 | 10 | 2 | 8 | 20.00% |
| Virginia Beach | 5 | 16 | 10 | 6 | 62.50% |
| Western Tidewater | 5 | 9 | 6 | 3 | 66.67% |
| TOTAL | | 400 | 166 | 234 | 41.50% |

Table 7: Indicators by CSB

| CSB | Ind01 | Ind02 | Ind03 | Ind04 | Ind05 | Ind06 | Ind07 | Ind08 | Ind09 | Ind10 |
|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Alexandria | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 66.7% | 66.7% |
| Alleghany Highlands | 100.0% | 100.0% | 100.0% | 50.0% | 100.0% | 33.3% | 66.7% | 50.0% | 100.0% | 100.0% |
| Arlington | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 85.7% | 100.0% | 100.0% | 0.0% | 71.4% |
| Blue Ridge | 36.4% | 0.0% | 36.4% | 63.6% | 100.0% | 9.1% | 90.9% | 81.8% | 100.0% | 100.0% |
| Chesapeake | 77.8% | 77.8% | 55.6% | 100.0% | 100.0% | 44.4% | 66.7% | 100.0% | 0.0% | 11.1% |
| Chesterfield | 100.0% | 100.0% | 100.0% | 75.0% | 100.0% | 90.0% | 95.0% | 100.0% | 0.0% | 0.0% |
| Colonial | 100.0% | 100.0% | 100.0% | 85.7% | 100.0% | 42.9% | 100.0% | 100.0% | 42.9% | 100.0% |
| Crossroads | 100.0% | 50.0% | 87.5% | 87.5% | 100.0% | 75.0% | 75.0% | 100.0% | 75.0% | 100.0% |
| Cumberland Mountain | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Danville-Pittsylvania | 90.0% | 90.0% | 100.0% | 80.0% | 100.0% | 70.0% | 90.0% | 100.0% | 50.0% | 50.0% |
| Dickenson | 100.0% | 40.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 40.0% | 100.0% |
| District 19 | 88.9% | 88.9% | 100.0% | 100.0% | 100.0% | 11.1% | 100.0% | 100.0% | 11.1% | 44.4% |
| Eastern Shore | 100.0% | 100.0% | 100.0% | 85.7% | 100.0% | 57.1% | 100.0% | 100.0% | 28.6% | 85.7% |
| Fairfax-Falls Church | 86.4% | 72.7% | 86.4% | 81.8% | 100.0% | 31.8% | 68.2% | 77.3% | 63.6% | 59.1% |
| Goochland-Powhatan | 100.0% | 100.0% | 100.0% | 83.3% | 100.0% | 100.0% | 100.0% | 100.0% | 0.0% | 100.0% |
| Hampton-NN | 92.9% | 92.9% | 100.0% | 85.7% | 85.7% | 85.7% | 92.9% | 100.0% | 50.0% | 92.9% |
| Hanover | 50.0% | 50.0% | 100.0% | 100.0% | 100.0% | 50.0% | 100.0% | 100.0% | 12.5% | 75.0% |
| Harrisonburg-Rgkhm | 25.0% | 12.5% | 100.0% | 62.5% | 100.0% | 75.0% | 100.0% | 87.5% | 100.0% | 100.0% |
| Henrico | 85.7% | 85.7% | 100.0% | 92.9% | 100.0% | 100.0% | 100.0% | 100.0% | 64.3% | 85.7% |
| Highlands | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 71.4% | 71.4% | 100.0% | 0.0% | 57.1% |
| Horizon | 53.3% | 46.7% | 0.0% | 60.0% | 100.0% | 33.3% | 100.0% | 100.0% | 93.3% | 86.7% |
| Loudoun | 66.7% | 66.7% | 100.0% | 88.9% | 100.0% | 88.9% | 100.0% | 100.0% | 44.4% | 88.9% |
| Middle Peninsula-NN | 100.0% | 100.0% | 100.0% | 88.9% | 100.0% | 88.9% | 100.0% | 100.0% | 44.4% | 100.0% |
| Mount Rogers | 100.0% | 100.0% | 70.0% | 100.0% | 100.0% | 100.0% | 80.0% | 100.0% | 20.0% | 100.0% |
| New River Valley | 90.0% | 90.0% | 0.0% | 40.0% | 100.0% | 100.0% | 100.0% | 50.0% | 100.0% | 100.0% |
| Norfolk | 76.9% | 30.8% | 0.0% | 92.3% | 100.0% | 15.4% | 100.0% | 100.0% | 46.2% | 46.2% |
| Northwestern | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 27.3% | 72.7% | 100.0% | 100.0% | 100.0% |
| Piedmont | 100.0% | 60.0% | 100.0% | 80.0% | 100.0% | 70.0% | 90.0% | 100.0% | 40.0% | 50.0% |
| Planning District One | 100.0% | 71.4% | 100.0% | 71.4% | 100.0% | 100.0% | 85.7% | 100.0% | 100.0% | 100.0% |
| Portsmouth | 100.0% | 100.0% | 11.1% | 88.9% | 100.0% | 22.2% | 100.0% | 66.7% | 11.1% | 33.3% |
| Prince William | 100.0% | 75.0% | 91.7% | 91.7% | 100.0% | 91.7% | 100.0% | 100.0% | 16.7% | 58.3% |
| Rappahannock-Rapidan | 88.9% | 55.6% | 100.0% | 77.8% | 100.0% | 88.9% | 66.7% | 88.9% | 55.6% | 55.6% |

| | | | | | | | | | | |
|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Rappahannock Area | 100.0% | 100.0% | 84.6% | 69.2% | 100.0% | 84.6% | 100.0% | 100.0% | 53.9% | 46.2% |
| Region Ten | 100.0% | 100.0% | 100.0% | 90.0% | 100.0% | 80.0% | 100.0% | 100.0% | 90.0% | 100.0% |
| Richmond | 100.0% | 100.0% | 100.0% | 91.7% | 100.0% | 91.7% | 100.0% | 75.0% | 41.7% | 91.7% |
| Rockbridge | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 83.3% | 100.0% | 33.3% | 50.0% | 100.0% |
| Southside | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 62.5% | 100.0% | 100.0% | 50.0% | 75.0% |
| Valley | 80.0% | 40.0% | 70.0% | 100.0% | 100.0% | 90.0% | 90.0% | 90.0% | 10.0% | 100.0% |
| Virginia Beach | 93.8% | 68.8% | 100.0% | 87.5% | 100.0% | 81.3% | 93.8% | 100.0% | 50.0% | 93.8% |
| Western Tidewater | 66.7% | 66.7% | 100.0% | 88.9% | 100.0% | 100.0% | 100.0% | 100.0% | 77.8% | 100.0% |
| TOTAL | 88.0% | 77.5% | 82.5% | 85.0% | 99.5% | 69.3% | 92.0% | 93.0% | 50.3% | 74.8% |